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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,415	10/30/2002	George F. Charvat	742/226	6982
757	7590	05/31/2005		
BRINKS HOER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610				
			EXAMINER HOWELL, DANIEL W	
			ART UNIT 3722	PAPER NUMBER

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,415

Applicant(s)

CHARVAT, GEORGE F.

Examiner

Daniel W. Howell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37-39 is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-25, 27, 28 and 31 is/are rejected.
- 7) ☒ Claim(s) 13, 26, 29, 30 and 32-36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10-30-02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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1. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The second line of claim 5 clearly has an error. The second letter in parentheses should not be "c."

2. Claims 17 and 21 are objected to because of the following informalities: A period should be placed at the end of claim 17. Claim 21 should state "claims," not "claim." Appropriate correction is required.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-10, 18-23, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (5,233,892) in view of Koeppen ((754,321). Roberts '892 shows a tool extension bar E having flat surfaces 12 to drive a socket. Flats 12 are parallel to the outer surface of the larger diameter portion of the bar E, and a shoulder is located between the flats and the larger diameter portion of the bar E. As part of the connection with the socket, the bar E has an angled hole 16 having a larger diameter end 18 and a smaller diameter end 20, such that a shoulder is formed within the bar. The ends of portions 18 and 20 emerge from the bar E at equal oblique angles with respect to the outer surface of the bar. Clearly, a common way to form this hole 16 would be to drill it. Koeppen shows a drilling machine having a first spindle which holds a large diameter drill bit 11 and a coaxial second spindle which holds a small diameter drill bit 12.

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Figure 3 shows at 62 that it is well known to drill oblique holes in a workpiece, and to drill different sized holes from opposite ends of a workpiece in order to form a stepped hole with a shoulder in the workpiece. It is considered to have been obvious to have formed the hole of Roberts with the drilling device and method as taught by Koeppen in order to accurately and quickly drill the oblique holes in the extension bar. Koeppen shows a fixture 13, 31, which will hold the workpiece in a selected position for drilling. With regard to claim 18, it is considered to have been obvious to have provided an appropriate fixture/workholder to hold the Roberts workpiece in a selected position, as the workpiece clearly must be held during the drilling operation in order to prevent it from accidental movement.

5. Claims 1-3, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (5,233,892) in view of Lindquist (1,593,979). Roberts '892 shows a tool extension bar E having flat surfaces 12 to drive a socket. Flats 12 are parallel to the outer surface of the larger diameter portion of the bar E, and a shoulder is located between the flats and the larger diameter portion of the bar E. As part of the connection with the socket, the bar E has an angled hole 16 having a larger diameter end 18 and a smaller diameter end 20, such that a shoulder is formed within the bar. The ends of portions 18 and 20 emerge from the bar E at equal oblique angles with respect to the outer surface of the bar, and the shoulder on the outer surface of the bar is substantially transverse to the drilling axis at a point where the drilling axis intersects the seating surface. Clearly, a common way to form this hole 16 would be to drill it. Lindquist shows a workpiece 4 to be drilled, the workpiece having a smaller diameter on one end, and a head on the other, with a shoulder/seating surface being formed at the intersection. Note from figure 1 that this shoulder is initially spaced from a gage/fixture 5, and in figure 3 the shoulder/seating surface

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has been moved into contact with the gage/fixture, such that the hole drilled in the workpiece will be at a known distance from the shoulder. In other words, the shoulder is being used as a reference point such that the "machined surface," or hole, is formed at the proper location. With regard to claim 16, the contact surface of the gage of Lindquist is considered to be the sensing element. The end of the workpiece 4 is clamped by a pair of spring jaws separated by a slit 26 (see figure 4 for the best view). The jaws are formed to conform to the shape of the workpiece. It is considered to have been obvious to have used a fixture as taught by Lindquist in order to locate the bar E of Roberts in a drilling machine in order to drill the hole at a known and desired location. With regard to claim 17, it is considered to have been obvious to have made the spring jaws of a shape which will conform to other shapes, including the out of round drive portion in order to hold a variety of workpieces to be drilled.

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts (5,233,892) in view of Japanese 3-281111. Roberts '892 shows a tool extension bar E having flat surfaces 12 to drive a socket. Flats 12 are parallel to the outer surface of the larger diameter portion of the bar E, and a shoulder is located between the flats and the larger diameter portion of the bar E. As part of the connection with the socket, the bar E has an angled hole 16 having a larger diameter end 18 and a smaller diameter end 20, such that a shoulder is formed within the bar. The ends of portions 18 and 20 emerge from the bar E at equal oblique angles with respect to the outer surface of the bar, and the shoulder on the outer surface of the bar is substantially transverse to the drilling axis at a point where the drilling axis intersects the seating surface. Clearly, a common way to form this hole 16 would be to drill it. In order to drill an oblique hole 4, the Japanese '111 device teaches to drill a seating surface (chamfering holes 7, 8) with a first

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drill 2, and then use that seating surface to prevent drill 5 from moving off the desired location when hole 4 is formed. In view of this teaching of Japanese '111, it is considered to have formed a seating surface on the bar E of Roberts before drilling the oblique hole in order to prevent the drill bit from moving off its desired location.

7. Claims 11, 12, 14, 15, 24, 25, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Koeppen as applied to claims 6, 10, and 18 above, and further in view of Japanese '111. In order to drill an oblique hole 4, the Japanese '111 device teaches to drill/mill a seating surface (chamfering holes 7, 8) with a first tool 2, and then use that seating surface to prevent drill 5 from moving off the desired location when hole 4 is formed. In view of this teaching of Japanese '111, it is considered to have formed a seating surface on the bar E of Roberts before drilling the oblique hole in order to prevent the drill bit from moving off its desired location. Figure 3 of Japanese '111 also shows that it is well known to use a guide bushing to prevent a drill bit from moving laterally from its desired position. It is considered to have been obvious to have used a guide bushing as taught by Japanese '111 in order to center the drill bit which forms the hole in the bar E of Roberts in order to prevent the drill from moving from its desired location.

8. Claims 13, 26, 29, 30, and 32-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 37-39 are allowed.

10. Any inquiry concerning the content of this communication from the examiner should be directed to Daniel Howell, whose telephone number is 571-272-4478. The examiner's office hours are typically about 10 am until 6:30 pm, Monday through Friday. The examiner's supervisor, Andrea Wellington, may be reached at 571-272-4483.

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In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office actions directly into the Group at FAX number 703-872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Daniel Howell of Art Unit 3722 at the top of your cover sheet.

A handwritten signature in cursive script, appearing to read 'Howell', written in black ink.

Daniel W. Howell  
Primary Examiner  
Art Unit 3722